

As phrased in the final Office Action, the rejection appears to be based on improper hindsight wherein Applicant's claims have been used as a starting point or "recipe" which teaches the invention, and the Examiner worked backwards in time to find the ingredients of the recipe in different prior art references. Applicant has not alleged that the individual elements of the claims are novel. Instead, the combinations of elements recited in the claims are not taught or suggested in the prior art.

To establish a *prima facie* case of obviousness, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicant's disclosure. MPEP 2143, *In Re Vaeck*, 947 F.2d 488, 20 USPQ 2d 1438 (Fed. Cir. 1991).

Using the primary reference ("Zhou") as a starting point, the disclosed adhesive composition contains perhaps two of the adhesive ingredients recited in Applicant's independent Claim 18, namely an atactic polymer and an isotactic polymer. Zhou does not teach that the adhesive is stretchable, and does not teach the inclusion of an elastomeric base polymer (which renders the adhesive stretchable). Zhou also does not disclose a laminate having a combination of a) a 180° static peel strength (time to fail) of at least about six hours and b) a dynamic peel strength after 85% stretch of at least about 2000 grams per 2-inch width. The elastomer in Applicant's composition enables the adhesive in the laminate to stretch by 85% without delaminating, so that the high dynamic peel strength is maintained after stretching.

Thus, the first question is whether Zhou provides sufficient motivation to add an elastomer to the adhesive composition, so as to achieve the claimed combination of properties. The level of skill in the art cannot be relied upon to provide a motivation to combine references. MPEP 2143.01, *AI-Site Corp. v. VSI International, Inc.*, 174 F.3d 1308, 50 USPQ 2d 1161 (Fed. Cir. 1999).

Zhou discloses an adhesive composition including selected ratios of crystalline and amorphous polymers, which have better performance characteristics and/or cost less than conventional hot melt adhesives (page 2, lines 12-15). Zhou specifically discloses a combination of crystalline and atactic polypropylene (page 2, lines 22-25). This combination is said to perform better and cost less than conventional hot melt adhesives (page 3, lines 4-5 and 10-12).

Zhou describes conventional hot melt adhesives as typically including several components, namely a polymer or polymers for cohesive strength; resins,

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tackifiers or other low molecular weight materials for adhesive strength; viscosity modifiers such as oils or wax-like materials; and other additives such as antioxidants (page 3, lines 12-18). Thus a primary distinguishing feature of the Zhou adhesive is its relative simplicity resulting from the requirement of only two ingredients instead of several. Zhou does indicate that other materials may optionally be added, but does not mention an elastomer (Col. 3, lines 17-21).

Zhou discloses laminates having dynamic peel strengths that were measured without stretching the laminates (Examples 5 and 6). Zhou provides no consideration of a laminate which is stretchable, or a dynamic peel strength after stretching. In summary, Zhou does not suggest the inclusion of an elastomer in the adhesive, and teaches away from an elastomer to the extent that a) elastomers are known to be expensive, contrary to the stated objectives of Zhou, and b) elastomers are present in some conventional hot melt adhesives, which Zhou seeks to distinguish over.

Lakshmanan discloses a conventional hot melt adhesive composition (known since 1989 or before) which includes at least an amorphous polypropylene, a tackifier, and a block copolymer elastomer (Abstract). Contrary to Zhou (which seeks to minimize or avoid conventional ingredients such as tackifiers), Lakshmanan discloses the tackifier as an essential ingredient (Col. 4, line 60 – Col. 5, line 8). This distinction is further demonstrated in the Examples of Lakshmanan:

An inspection of the data in Table III shows that when amorphous polypropylene is used alone as an adhesive in Run No. 1 some level of adhesion is obtained to high density polyethylene (HDPE) and polypropylene (PP) surfaces. When amorphous polypropylene was combined solely with a selectively hydrogenated block copolymer composed of styrene and ethylene butylene polymer blocks (Kraton GX-1657) in Run No. 2, no appreciable improvement in adhesion to a HDPE surface was achieved and adhesion to polypropylene was significantly reduced. When the same selectively hydrogenated block copolymer was combined solely with a tackifier in Run No. 7 no adhesion at all was obtained. When in Run No. 8 amorphous polypropylene was combined solely with a tackifier, the results were inferior to Run No. 1. The use of Kraton GX-1657, a wax and a tackifier, but no amorphous polypropylene, in Run No. 6 resulted in a composition exhibiting no adhesivity. Note, however, that in Runs Nos. 3, 4 and 5 wherein an adhesive containing the selectively hydrogenated block copolymer Kraton GX-1657, amorphous polypropylene and a tackifier was tested, unexpected and dramatic improvements in adhesive performance was obtained in both HDPE and PP surfaces. (Col. 9, line 17 – Col. 10, line 25).

For purposes of obviousness. The issue is whether Lakshmanan suggests adding an elastomer to a combination of isotactic and atactic polypropylene as described in Zhou. Lakshmanan provides no such motivation. As shown above, Lakshmanan discloses that adding the elastomer to polypropylene alone provides no improvement in adhesion. Only when the elastomer is combined with a tackifier (another conventional ingredient discouraged by Zhou) does Lakshmanan show an improvement in adhesion.

Thus, while Zhou focuses on using only two polypropylene ingredients and discourages using other "conventional" ingredients, Lakshmanan teaches that at least two ingredients must be used in addition to polypropylene. The two references are contradictory and irreconcilable, and cannot be combined. A person skilled in the art would not be motivated by either reference, or both, to make an adhesive composition using atactic polypropylene, isotactic polypropylene and elastomers.

Accordingly, this claim rejection should be withdrawn.

**b) Conclusion**

Applicant believes that the claims, as now presented, are in condition for allowance. If the Examiner detects any unresolved issues, then Applicant's attorney respectfully requests a telephone call from the Examiner, and a telephone interview.

Respectfully submitted,



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